



ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ
HELLENIC REPUBLIC



Εθνική Αρχή
Ανώτατης Εκπαίδευσης
Hellenic Authority
for Higher Education

Αριστέιδου 1 & Ευριπίδου 2 • 10559 Αθήνα | 1 Aristidou str. & 2 Evripidou str. • 10559 Athens, Greece
T. +30 211 1903 400 • E. secretariat@ethaee.gr • www.ethaee.gr

Αθήνα, 30-07-2026
Αρ. πρωτ. QA_4014

ΑΠΟΦΑΣΗ ΠΙΣΤΟΠΟΙΗΣΗΣ

Το Συμβούλιο Αξιολόγησης και Πιστοποίησης της Εθνικής Αρχής Ανώτατης Εκπαίδευσης (ΕΘΑΑΕ)

Έχοντας υπόψη:

1. Τις διατάξεις του Ν. 4653/2020 (ΦΕΚ 12/Α'/24-01-2020) «Εθνική Αρχή Ανώτατης Εκπαίδευσης. Ειδικοί Λογαριασμοί Κονδυλίων Έρευνας Ανώτατων Εκπαιδευτικών Ιδρυμάτων, Ερευνητικών και Τεχνολογικών Φορέων και άλλες Διατάξεις», όπως ισχύει.
2. Την υπ' αριθμ. 18135/Ζ1/7-2-2020 Απόφαση της Υπουργού Παιδείας και Θρησκευμάτων (ΦΕΚ 94/τεύχος ΥΟΔΔ/7-2-2020), περί διορισμού του Προέδρου του Ανώτατου Συμβουλίου της Εθνικής Αρχής Ανώτατης Εκπαίδευσης (ΕΘΑΑΕ), την υπ' αριθμ. 16384/Ζ1/15.02.2024 απόφαση του Υπουργού Παιδείας, Θρησκευμάτων και Αθλητισμού (ΦΕΚ 137/τ. ΥΟΔΔ/19-02-2024), περί παράτασης της θητείας του Προέδρου του Ανώτατου Συμβουλίου της ΕΘΑΑΕ, καθώς και την υπ' αριθμ. 88986/Ζ1/1.08.2024 απόφαση του Υπουργού Παιδείας, Θρησκευμάτων και Αθλητισμού (ΦΕΚ 846/Υ.Ο.Δ.Δ/7.8.2024) περί της ανανέωσης της θητείας του Προέδρου του Ανώτατου Συμβουλίου της Εθνικής Αρχής Ανώτατης Εκπαίδευσης (ΕΘΑΑΕ).
3. Την υπ' αριθμ. 15650/23-04-2020 Απόφαση του Προέδρου της ΕΘΑΑΕ (ΦΕΚ 329/τ. ΥΟΔΔ/04-05-2020) «Ορισμός των μελών του Συμβουλίου Αξιολόγησης και Πιστοποίησης (ΣΑΠ) της Εθνικής Αρχής Ανώτατης Εκπαίδευσης (ΕΘΑΑΕ)», όπως ισχύει.
4. Την υπ' αριθμ. QA 3989/24-07-2026 Έκθεση Πιστοποίησης της Επιτροπής Εξωτερικής Αξιολόγησης & Πιστοποίησης του ΠΜΣ «Ανόργανη Βιολογική Χημεία» του Τμήματος Χημείας του Πανεπιστημίου Ιωαννίνων.
5. Την 63/30-07-2026 συνεδρίαση του Συμβουλίου Αξιολόγησης και Πιστοποίησης, θέμα 2 «Έγκριση εκθέσεων πιστοποίησης – Χορήγηση πιστοποίησης».

ΠΙΣΤΟΠΟΙΕΙ ΟΤΙ

το Πρόγραμμα Μεταπτυχιακών Σπουδών

**Ανόργανη Βιολογική Χημεία
του Τμήματος Χημείας
του Πανεπιστημίου Ιωαννίνων**

συμμορφώνεται πλήρως με τις αρχές του Προτύπου Ποιότητας για την Πιστοποίηση των Προγραμμάτων Μεταπτυχιακών Σπουδών της ΕΘΑΑΕ και τις Αρχές και Κατευθυντήριες Οδηγίες για τη Διασφάλιση Ποιότητας στον Ευρωπαϊκό Χώρο Ανώτατης Εκπαίδευσης (ESG), για το επίπεδο σπουδών 7 του Εθνικού και Ευρωπαϊκού Πλαισίου Προσόντων.

Η διάρκεια ισχύος της πιστοποίησης ορίζεται για πέντε έτη, από 30-07-2026 έως 29-07-2031.

Ο Πρόεδρος της ΕΘΑΑΕ

Καθηγητής Περικλής Α. Μήτκας



Με τη συγχρηματοδότηση
της Ευρωπαϊκής Ένωσης



Πρόγραμμα
Ανθρώπινο Δυναμικό και
Κοινωνική Συνοχή

enqa



ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ
HELLENIC REPUBLIC



**Εθνική Αρχή
Ανώτατης Εκπαίδευσης**
Hellenic Authority
for Higher Education

Αριστείδου 1 & Ευριπίδου 2 • 10559 Αθήνα | 1 Aristidou str. & 2 Evripidou str. • 10559 Athens, Greece
T. +30 211 1903 400 • E. secretariat@ethaee.gr • www.ethaee.gr

Accreditation Report **for the Postgraduate Study Programme of:**

Biological Inorganic Chemistry

Department: Chemistry

Institution: University of Ioannina

Date: March 2026



Με τη συγχρηματοδότηση
της Ευρωπαϊκής Ένωσης



Πρόγραμμα
Ανθρώπινο Δυναμικό και
Κοινωνική Συνοχή



Report of the Panel appointed by the HAHE to undertake the review of the Postgraduate Study Programme of **Biological Inorganic Chemistry** of the **University of Ioannina** for the purposes of granting accreditation

TABLE OF CONTENTS

Part A: Background and Context of the Review	4
I. The External Evaluation & Accreditation Panel.....	4
II. Review Procedure and Documentation	5
III. Postgraduate Study Programme Profile.....	8
Part B: Compliance with the Principles	10
PRINCIPLE 1: QUALITY ASSURANCE POLICY AND QUALITY GOAL SETTING FOR THE POSTGRADUATE STUDY PROGRAMMES OF THE INSTITUTION AND THE ACADEMIC UNIT	10
PRINCIPLE 2: DESIGN AND APPROVAL OF POSTGRADUATE STUDY PROGRAMMES.....	14
PRINCIPLE 3: STUDENT-CENTRED LEARNING, TEACHING, AND ASSESSMENT	19
PRINCIPLE 4: STUDENT ADMISSION, PROGRESSION, RECOGNITION OF POSTGRADUATE STUDIES, AND CERTIFICATION	22
PRINCIPLE 5: TEACHING STAFF OF POSTGRADUATE STUDY PROGRAMMES	24
PRINCIPLE 6: LEARNING RESOURCES AND STUDENT SUPPORT.....	27
PRINCIPLE 7: INFORMATION MANAGEMENT	29
PRINCIPLE 8: PUBLIC INFORMATION CONCERNING THE POSTGRADUATE STUDY PROGRAMMES	31
PRINCIPLE 9: ON-GOING MONITORING AND PERIODIC INTERNAL EVALUATION OF POSTGRADUATE STUDY PROGRAMMES	33
PRINCIPLE 10: REGULAR EXTERNAL EVALUATION OF POSTGRADUATE STUDY PROGRAMMES.....	35
Part C: Conclusions	37
I. Features of Good Practice	37
II. Areas of Weakness	37
III. Recommendations for Follow-up Actions	37
IV. Summary & Overall Assessment	37

PART A: BACKGROUND AND CONTEXT OF THE REVIEW

I. The External Evaluation & Accreditation Panel

The Panel responsible for the Accreditation Review of the postgraduate study programme of Biological Inorganic Chemistry of the **University of Ioannina** comprised the following five (5) members, drawn from the HAHE Register, in accordance with Laws 4009/2011 & 4653/2020:

1. Professor Sotirios Xantheas (Chair)
Pacific Northwest National Laboratory & University of Washington
2. Professor Dimitrios Argyropoulos
North Carolina State University (NCSU)
3. Professor Emmanuel Giannelis
Cornell University
4. Professor Christos Takoudis
University of Illinois Chicago
5. Zoi-Lina Koutsogianni
Aristotle University of Thessaloniki

II. Review Procedure and Documentation

In preparation for the review and assessment of the interdepartmental PSP “Biological Inorganic Chemistry” of the University of Ioannina, the External Evaluation & Accreditation Panel (EEAP) reviewed the material provided by the Hellenic Authority of Higher Education (HAHE), which included background information and guidance on the review and accreditation process, detailed material and data related to the programme under evaluation, such as the programme accreditation proposal and associated appendices.

The programme review was conducted via Zoom teleconferences, organized and coordinated by HAHE and the University of Ioannina, and it was part of a wider back-to-back accreditation exercise involving 2 PSPs: PSP1 “Chemistry” and PSP2 “Biological Inorganic Chemistry”.

The schedule and agenda of the review were as stated below (all times refer to Greek time).

Monday, 23/03/2026

15:30 – 16:00 hrs.: Private meeting of the EEAP members only. Discussion on the accreditation proposals; allocation of tasks; assignment of writing parts of the draft accreditation report.

16:00 – 17:00 hrs.: Meeting with the Directors of the two PSPs, the Head of the Department, MODIP, Steering Committee/OMEA members. Welcome by Prof. Dimitra Hela (Head of the Department of Chemistry, University of Ioannina) and presentations by the two post-graduate study programmes: PSP1 “Chemistry” presented by Prof. Angelos Kalampounias, Director of the PSP1, Dept. of Chemistry, Univ. of Ioannina, and PSP2 “Biological Inorganic Chemistry” presented by Prof. Sotirios Hadjikakou, Director of the PSP2. Also present were Prof. Dimosthenis L. Giokas, member of Steering Committee (PSP1); Prof. Christina-Anna Mitsopoulou, National and Kapodistrian University of Athens, member of Steering Committee (PSP2); Prof. Vassilios Sakkas, OMEA member; Prof. Emmanouil Manos, OMEA member; Prof. Panagiota Kanti, President of the QAU (Vice-Rector of Academic and Student Affairs) and Ms. Effrosini Zarkali, MODIP staff, Supervisor. The presentations by the two PSP Directors provided information on the history of the programmes, the academic profiles, the current status and future developments and strengths or areas of concern, the degree of compliance to the quality standards for accreditation, the various internal procedures, the process of course examinations, the review of students’ progress, the evaluations of the courses and instructors etc. Adequate time was allowed for the members of the EEAP to ask questions.

17:00 – 17:30 hrs.: On-line tour: classrooms, lecture halls, libraries laboratories, and other facilities related to the two PSPs. Discussion about the facilities presented in the videos produced for this purpose: <https://youtu.be/iPl6Cnrt-N0> (PSP1) and [BIC UOI - YouTube](#) (PSP2). The videos were viewed by EEAP members at their own convenient times. During the meeting a discussion was held to further evaluate facilities and learning resources as well as any relevant administrative support provided for the successful delivery of the 2 PSPs. Participating members included Ms. Marilena Kordonori, administrative staff member, teaching staff members of PSP1: Prof. Ioannis Konstantinou, Prof. Gerasimos Malandrinos, Assoc. Prof.

Apostolos Gkamas, Assist. Prof. Georgios Rotas and teaching staff members of PSP2: Prof. Sotirios Hadjidakou, Director of PSP2.

17:30 – 18:00 hrs.: Private meeting of the EEAP members only to debrief, summarize and reflect on the information provided and evaluated during the first day of meetings.

Tuesday, 24/03/2026

The EEAP was fully occupied in multiple back-to-back meetings from 15:00 to 20:30 hrs. to evaluate the PSP1 “Chemistry” from the same department.

Wednesday, 25/03/2026

National Holiday, no meetings held

Thursday, 26/03/2026

15:00 – 15:45 hrs.: Meeting with the teaching staff of the PSP2. Participating staff included Prof. Nikolaos Kourkouvelis, University of Ioannina; Prof. Thomas Mavromoustakos, National and Kapodistrian University of Athens; Prof. Georgios Psomas, Aristotle University of Thessaloniki, Chemistry Department; Prof. Anastasios Keramidas, University of Cyprus; Prof. Athanasios Salifoglou, Aristotle University of Thessaloniki, Chemical Engineering Department; Prof. Theocharis Stamatatos, University of Patras; Prof. Constantinos Milios, University of Crete; Prof. Athanasios Tsipis, University of Ioannina; Prof. Anastasios Tasiopoulos, University of Cyprus; Dr. Christina Banti, University of Ioannina. The topics ranged from discussing (among others) professional development and mobility of teaching staff, the process of student evaluations of the courses offered in the PSP, existing links between research and teaching, the expertise of teaching staff expertise relating to the PSP, learning outcomes and potential areas for improvement.

16:00 – 16:45 hrs.: Meeting of the EEAP members with 10 students of the PSP2. The discussion was centered around the overall satisfaction of the current students with the content, direction and resources of the PSP, their input in quality assurance as well as issues concerning student life and welfare.

17:00 – 17:30 hrs.: Break

17:30 – 18:15 hrs.: Meeting of the EEAP members with graduates of the PSP2. There were 6 (out of 9 scheduled) participating graduates. The discussion was centered around their experience with the PSP and how it contributed to their professional career.

18:30 – 19:15 hrs.: Meeting of the EEAP members with employers and social partners (6 total) of the PSP2. The discussion was centered around the relations of the PSP with external stakeholders from the private and public sector, their involvement in the planning of the PSP and (when applicable) their experience with the quality of PSP2 graduates that are now employed in their sectors.

19:30 – 20:00 hrs.: The EEAP met privately via the HAHE zoom link to discuss and debrief the day's activities and findings.

20:00-20:30 hrs.: The EEAP joined the director of PSP2 (Prof. Sotirios Hadjikakou), the Head of the Department (Prof. Dimitra G. Hela), representatives of the steering committee, MODIP and OMEA to provide initial feedback of the day's findings and to seek any clarifications where appropriate. Participating staff of PSP2 were Prof. Christina-Anna Mitsopoulou, National and Kapodistrian University of Athens, member of Steering Committee (PSP2); Prof. Vassilios Sakkas, OMEA member; Prof. Emmanouil Manos, OMEA member; Prof. Panagiota Kanti, President of the QAU (Vice-Rector of Academic and Student Affairs) and Ms. Effrosini Zarkali, MODIP staff, Supervisor.

Friday, 27/03/2026 – Sunday 29/03/2026

Report drafting and electronic communications between EEAP members.

III. Postgraduate Study Programme Profile

The Department of Chemistry of the University of Ioannina, pursuant to the Senate decision (1032/41/22-9-2016) (see A19.3) and the Rectoral decision on re-establishment (Ref. No. 16244/11-6-2018) (see A19.4)—as amended by the decisions of the Special Inter-departmental Committee (EPS) meeting no. 29/12-12-2022 (see 19.5) and the relevant decision of the University of Ioannina Senate (see 19.6)—organizes and operates, starting from the 2018-2019 academic year, an inter-state, inter-institutional Postgraduate Studies Program (PSP) in "Inorganic Biological Chemistry," in accordance with the provisions of said decision and the provisions of Law 4957/2022 (Government Gazette A 141/21-7-2022). The Government Gazette issue regarding the re-establishment of the Inter-departmental Postgraduate Programme (IPGP) is published in issue 2612/5-7-2018, Vol. B (see 19.7).

The Inter-institutional Postgraduate Program titled "Inorganic Biological Chemistry", led by the Department of Chemistry at the University of Ioannina in collaboration with the Departments of Chemistry at the National and Kapodistrian University of Athens, Aristotle University of Thessaloniki, University of Patras, University of Crete, and University of Cyprus, has the mission of providing education in the science of Inorganic Biological Chemistry and, by extension, of biological chemistry and its modern applications, so that graduates of the Joint Postgraduate Programme are equipped with fundamental and specialized knowledge, laboratory experience, and other high-quality skills.

The strategic goals of the PSP include:

- a. High-level education within the Joint Postgraduate Programme, with the quality objective of the "continuous improvement of the standard of education provided to postgraduate students." This is achieved by monitoring the smooth operation of the Programme and ensuring the attainment of expected learning outcomes—as evidenced by continuous course evaluations by postgraduate students, the internal evaluation report, and, ultimately, the labour market absorption of graduates.
- b. Production of high-level research and promotion of excellence with a focus on quality, specifically "Promoting high-level research and linking it to the educational process" through the fostering of research collaborations, the utilization and dissemination of results for the benefit of society, the publication of postgraduate students' work in high-impact international journals following peer review, and potential patents for the protection of results from master's theses with societal application, the presentation of postgraduate students' findings via lectures or poster sessions at international conferences, and the promotion of excellence and innovation by encouraging, supporting, and rewarding the teaching and research achievements of the Joint Postgraduate Study Programme (JPSP) members—as established by the School of Science of the University of Ioannina through the School of Science Teaching Commendation scheme.

- c. Strengthening the outward-looking orientation of the Joint Interdepartmental Postgraduate Programme (JIPP) and linking the educational process to the labor market—with quality objectives such as “enhancing mobility” and “organizing or participating in workshops and information events for labor market stakeholders”—through the fostering and promotion of collaborations, networking and outreach activities, and the JIPP’s international presence.

The Interdepartmental Postgraduate Programme awards a Master’s Degree in Inorganic Biological Chemistry. The aim of the Programme is the training and specialization of high-level postgraduate scientists who will contribute to the advancement of the science of chemistry and rapidly evolving technology. It also aims to train competent professionals for strategic sectors—such as public administration, universities, research institutes, and industry—and to meet the country's development needs.

All courses are semester-long and compulsory, comprising thirteen (13) weeks of instruction as well as laboratories, tutorials, discussions, exercises, or assignments where required. A total of ninety (90) European Credit Transfer and Accumulation System (ECTS) credits are required for the award of the Master’s degree. The program combines postgraduate coursework with practical experience in both basic and laboratory research.

To be awarded the Master’s degree, students are required to attend and successfully pass four (4) theoretical courses and one (1) laboratory course during the first semester of study, as well as complete all laboratory and research activities during the second semester. The total number of credits for the first two semesters is sixty (60) ECTS. Each course is worth five (5) ECTS credits, and each laboratory course is worth ten (10) ECTS credits. The Master’s thesis is conducted during the third semester of study and is worth 30 ECTS credits.

In addition to the Erasmus+ scholarship candidate selection criteria established by the University of Ioannina, the Department of Chemistry has adopted the following criteria for the selection and ranking of its student candidates for the Erasmus+ scholarship. Postgraduate students participating in the Erasmus+ program serve as ambassadors of the Interdepartmental Postgraduate Program (IPGP) at the host laboratories. There, the postgraduate student will gain valuable experience and enhance their qualifications, both regarding their educational process and through interaction and knowledge exchange with other educational institutions. Master’s students must:

- have passed all courses of the first semester of the Master’s program;
- have obtained approval from their Master’s thesis supervisor for their period abroad via Erasmus; and
- have obtained the consent of the Master’s Program Director for their period abroad via Erasmus.

PART B: COMPLIANCE WITH THE PRINCIPLES

PRINCIPLE 1: QUALITY ASSURANCE POLICY AND QUALITY GOAL SETTING FOR THE POSTGRADUATE STUDY PROGRAMMES OF THE INSTITUTION AND THE ACADEMIC UNIT

INSTITUTIONS SHOULD APPLY A QUALITY ASSURANCE POLICY AS PART OF THEIR STRATEGIC MANAGEMENT. THIS POLICY SHOULD EXPAND AND BE AIMED (WITH THE COLLABORATION OF EXTERNAL STAKEHOLDERS) AT THE POSTGRADUATE STUDY PROGRAMMES OF THE INSTITUTION AND THE ACADEMIC UNIT. THIS POLICY SHOULD BE PUBLISHED AND IMPLEMENTED BY ALL STAKEHOLDERS.

The quality assurance policy of the academic unit should be in line with the quality assurance policy of the Institution and must be formulated in the form of a public statement, which is implemented by all stakeholders. It focuses on the achievement of special goals related to the quality assurance of the study programmes offered by the academic unit.

Indicatively, the quality policy statement of the academic unit includes its commitment to implement a quality policy that will promote the academic profile and orientation of the postgraduate study programme (PSP), its purpose and field of study; it will realise the programme's goals and it will determine the means and ways for attaining them; it will implement appropriate quality procedures, aiming at the programme's improvement.

In particular, in order to implement this policy, the academic unit commits itself to put into practice quality procedures that will demonstrate:

- a) the suitability of the structure and organisation of postgraduate study programmes*
- b) the pursuit of learning outcomes and qualifications in accordance with the European and National Qualifications Framework for Higher Education - level 7*
- c) the promotion of the quality and effectiveness of teaching at the PSP*
- d) the appropriateness of the qualifications of the teaching staff for the PSP*
- e) the drafting, implementation, and review of specific annual quality goals for the improvement of the PSP*
- f) the level of demand for the graduates' qualifications in the labour market*
- g) the quality of support services, such as the administrative services, the libraries and the student welfare office for the PSP*
- h) the efficient utilisation of the financial resources of the PSP that may be drawn from tuition fees*
- i) the conduct of an annual review and audit of the quality assurance system of the PSP through the cooperation of the Internal Evaluation Group (IEG) with the Institution's Quality Assurance Unit (QAU)*

Documentation

- Quality Assurance Policy of the PSP
- Quality goal setting of the PSP

Study Programme Compliance

I. Findings

This report evaluates the compliance of the Postgraduate Program (PSP) "Biological Inorganic Chemistry" with Principle 1, using the supplied documentation and the evidence accumulated during the discussions and deliberations of the committee. The review of the submitted documents reveals a comprehensive and well-structured approach to quality assurance for the Chemistry PSP. The key findings are as follows:

Formal Quality Assurance (QA) Policy: The PSP has a formal, documented Quality Assurance Policy. This policy is explicitly stated to be in line with the Institution's (University of Ioannina) overall QA policy and is published on the PSP's official website (<https://bic.chem.uoi.gr/Master/>).

Commitment to Implementation & Continuous Improvement: The provided QA policy document, underlines the academic unit's official commitment by stating that the teaching staff commits to implementing the Institution's quality policy and makes a continuous effort to achieve its goals. Furthermore, the policy explicitly includes a commitment to continuous improvement. This is articulated well through its specific strategic objectives.

Financial Resources: The PSP does not charge tuition fees (as per Article 12 of the updated regulation (FEK1649 B 2023)). Funding is derived from research programs, donations, and the state budget, and its management is the responsibility of the individual principal investigators.

Communication of the Policy: The policy is communicated through multiple channels such as Publication on the PSP's official website and Presentation to students during the annual welcome/information session at the start of the academic year.

Quality Goal Setting: The PSP has established a comprehensive quality goal-setting document. This document translates three strategic objectives into specific, measurable quality goals. For each goal, it defines Key Performance Indicators (KPIs), a baseline value, a target value, specific actions to be taken, responsible parties, and a timeline.

The KPIs and Monitoring: The KPIs identified in the goal-setting document are directly relevant to the PSP's objectives:

- Education: Annual graduation rate (baseline 70%, target 71%) and average diploma grade (baseline 9.64, target 9.65).
- Research: Mean number of publications per faculty member, mean number of citations, number of conference participations, and number of publications by postgraduate students (with a target to increase from 13 to 14).
- Outreach: Annual mobility rate for both students and faculty (targeted to increase to 0.5%) and the number of regular annual career-oriented seminars/events (targeted to 1).

The process for monitoring these goals, includes continuous monitoring of student progress and the use of student evaluations. Furthermore, the internal evaluation report provides evidence of this monitoring, where findings (e.g., low international mobility) are used to inform corrective actions.

2. **Learning Outcomes (Level 7):** The PSP explicitly outlines its learning outcomes at Level 7. These outcomes, detailed in the study guide and course syllabi, cover a broad range of skills and competencies appropriate for a second-cycle degree, including:
 - Advanced knowledge and critical understanding of theories and principles.
 - Solving complex problems using acquired knowledge.
 - Developing skills for autonomous and team work.
 - Cultivating a culture of lifelong learning.
 - Demonstrating professional, social, and ethical values.

II. Analysis

The PSP demonstrates a robust and well-structured approach to Principle 1. The existence of a dedicated QA policy and, more importantly, a detailed goal-setting framework, indicates that quality is not merely an abstract concept but a managed process.

The strength of the system lies in its goal-setting processes and relevant document. By linking high-level strategic objectives (Education, Research, Outreach) to specific, time-bound, and measurable quality goals with assigned responsibilities, the PSP has created a functional plan for quality improvement. The use of KPIs like graduation rates, research output, and mobility rates allows for quantifiable tracking of progress.

The commitment to continuous improvement is evident. The process is cyclical: quality goals are set, actions are implemented (e.g., monitoring student progress, organizing seminars), results are measured (through KPIs and student evaluations), and findings are reviewed. The internal evaluation report confirms this, as it highlights the identification of a weakness (low student mobility) and proposes a corrective action specified that "Encourages the postgraduate students to participate in mobility programs".

The communication of the policy is adequate, with clear publication and an introductory meeting for new students. The policy's alignment with the institutional framework is also apparent, as it references the University of Ioannina's quality procedures.

The lack of a financial management commitment within the QA framework is a necessary adaptation to the PSP's tuition-free status. Its absence is not a non-compliance, but rather a reflection of the PSP's specific financial model, where the focus is on the efficient management of research and operational funds by individual faculty members rather than a central pool of tuition revenue.

III. Conclusions

The PSP "Inorganic Biological Chemistry" has established a comprehensive, documented, and implemented Quality Assurance Policy that is fully appropriate for its scope and goals. The policy is effectively translated into actionable objectives through a detailed quality goal-setting framework with measurable KPIs. A clear commitment to continuous improvement is embedded within its structure and evidenced by the internal review processes. The learning outcomes are clearly defined and align with the requirements for Level 7 qualifications.

The policy and its associated goals are communicated to the relevant stakeholders, and the system demonstrates a functioning loop of planning, implementation, monitoring, and corrective action.

Panel Judgement

Principle 1: Quality assurance policy and quality goal setting for the postgraduate study programmes of the institution and the academic unit	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

The panel recommends the following actions to further strengthen the already robust quality assurance system:

- **External Advisory Board Created & its Input:** It is very encouraging that the PSP has recently proceeded in creating an External Advisory Board comprising alumni, employers from key sectors (pharma, food, environment), and academic partners. This board should meet annually to provide feedback on the curriculum, emerging industry trends, and the programme's strategic direction, thereby directly informing the quality goal-setting process. This highly credible action further strengthened the process of gathering feedback from employers and extremal stakeholders.
- **Enhance Alumni Data Collection:** The internal evaluation correctly identified the lack of systematic alumni career data as a weakness. The panel strongly supports the proposed action to create a database of professional development for graduates. The panel noticed that there are current efforts in progress to do this and this is very encouraging. This should be prioritized and implemented soon as planned. This data will provide invaluable insights for assessing the "level of demand for graduates' qualifications in the labour market," as required by the principle.
- **Promote & Advertise PSP's Successes:** The PSP already enjoys the benefits of having graduated a set of highly successful individuals who are becoming integrated in industry, academia, regulatory organizations etc. Brief statements (and a small picture) from them related to how the PSP empowered them to succeed, need be uploaded on the web page as powerful testimonials.
- **Enhance & Publicize Monitoring:** While the goal-setting document mentions the collection of data, these efforts need become more formal and the targeted and achieved KPIs be announced and disseminated internally and to students. This will provide a clearer record of the achievement of the set targets.

PRINCIPLE 2: DESIGN AND APPROVAL OF POSTGRADUATE STUDY PROGRAMMES

INSTITUTIONS SHOULD DEVELOP THEIR POSTGRADUATE STUDY PROGRAMMES FOLLOWING A DEFINED WRITTEN PROCESS WHICH WILL INVOLVE THE PARTICIPANTS, INFORMATION SOURCES AND THE APPROVAL COMMITTEES FOR THE POSTGRADUATE STUDY PROGRAMMES. THE OBJECTIVES, THE EXPECTED LEARNING OUTCOMES AND THE EMPLOYMENT PROSPECTS ARE SET OUT IN THE PROGRAMME DESIGN. DURING THE IMPLEMENTATION OF THE POSTGRADUATE STUDY PROGRAMMES, THE DEGREE OF ACHIEVEMENT OF THE LEARNING OUTCOMES SHOULD BE ASSESSED. THE ABOVE DETAILS, AS WELL AS INFORMATION ON THE PROGRAMME'S STRUCTURE ARE PUBLISHED IN THE STUDENT GUIDE.

The academic units develop their postgraduate study programmes following a well-defined procedure. The academic profile and orientation of the programme, the research character, the scientific objectives, the specific subject areas, and specialisations are described at this stage.

The structure, content and organisation of courses and teaching methods should be oriented towards deepening knowledge and acquiring the corresponding skills to apply the said knowledge (e.g. course on research methodology, participation in research projects, thesis with a research component).

The expected learning outcomes must be determined based on the European and National Qualifications Framework (EQF, NQF), and the Dublin Descriptors for level 7. During the implementation of the programme, the degree of achievement of the expected learning outcomes and the feedback of the learning process must be assessed with the appropriate tools. For each learning outcome that is designed and made public, it is necessary that its evaluation criteria are also designed and made public.

In addition, the design of PSP must consider:

- *the Institutional strategy*
- *the active involvement of students*
- *the experience of external stakeholders from the labour market*
- *the anticipated student workload according to the European Credit Transfer and Accumulation System (ECTS) for level 7*
- *the option of providing work experience to students*
- *the linking of teaching and research*
- *the relevant regulatory framework and the official procedure for the approval of the PSP by the Institution*

The procedure of approval or revision of the programmes provides for the verification of compliance with the basic requirements of the Standards by the Institution's Quality Assurance Unit (QAU).

Documentation

- *Senate decision for the establishment of the PSP*
- *PSP curriculum structure: courses, course categories, ECTS awarded, expected learning outcomes according to the EQF, internship, mobility opportunities*
- *Labour market data regarding the employment of graduates, international experience in a relevant scientific field*
- *PSP Student Guide*
- *Course and thesis outlines*
- *Teaching staff (name list including of areas of specialisation, its relation to the courses taught, employment relationship, and teaching assignment in hours as well as other teaching commitments in hours)*

Study Programme Compliance

I. Findings

The PSP "Inorganic Biological Chemistry" was established following a rigorous, multi-stage, and fully documented approval process that adhered to appropriate national and institutional standards. The programme was initially approved by the University of Ioannina Senate in 2016 (Decision 1032/41/22-9-2016) and re-established in 2018 (Official Gazette FEK 2612/5-7-18, τ. Β). The most recent amendment, aligning with Law 4957/2022, was approved on February 28, 2023, and published in the Official Gazette (FEK 1649/Β/17-03-2023). This process involved the formal consent of all six collaborating Chemistry Departments across Greece and Cyprus, documented in a Special Cooperation Protocol.

In designing the programme, the PSP took into account a comprehensive set of factors. These included the institutional strategy of the University of Ioannina to enhance interdisciplinary postgraduate education with high societal impact, the academic profile of a specific and rapidly developing scientific field, the needs of the labor market in sectors such as health services, pharmaceutical and chemical industries, and research centers, and the relevant regulatory framework of national laws (N.4485/2017, N.4957/2022). The programme was fundamentally designed to be research-oriented, leveraging the faculty's research strengths to create a curriculum that develops advanced research skills.

The curriculum aligns with universally accepted standards for a Level 7 Master's programme in the sciences. This is demonstrated through its use of the European Credit Transfer and Accumulation System (ECTS) to quantify student workload, with a total of 90 ECTS required for graduation. The expected learning outcomes are explicitly set at Level 7 of the European and National Qualifications Framework (EQF, NQF), as referenced in the course syllabi. The curriculum's research orientation, culminating in a substantial master's thesis, is a standard feature of high-quality science Master's programmes internationally.

The structure of the programme is rational and clearly articulated. It spans three semesters for full-time study (or five semesters for part-time) and follows a logical progression. The first semester (30 ECTS) focuses on core theoretical knowledge and foundational courses. The second semester (30 ECTS) introduces research methodology and marks the commencement of the master's thesis. The third semester (30 ECTS) is dedicated exclusively to the completion and presentation of the thesis. All courses are mandatory, ensuring a uniform and high-quality educational experience for all students, with a clear distinction between theoretical courses, laboratory courses, and the thesis.

The PSP has established a formal and documented procedure for periodic curriculum revisions, embedded within its quality assurance system. As stated in the main proposal for accreditation document, the programme's goals are continuously monitored through student evaluations, internal assessment reports, and analysis of graduate employability data. The Program Committee is responsible for reviewing this information, proposing revisions, and submitting them for approval to the relevant governing bodies. A concrete valuable example is the revision of the "Bioinorganic Chemistry" course syllabus in response to student feedback, documented in the quality assurance procedures.

This revision process actively involves a broad range of stakeholders. Students provide direct input through mandatory, anonymous, end-of-semester course evaluations. The PSP has established an alumni network and has begun collecting feedback from graduates through questionnaires to inform programme improvements. External experts are regularly invited to deliver lectures and seminars, and the Program Committee has the authority to invite external

experts to teach specialized topics (e.g., experts from "Demokritos" were invited to teach a module on X-ray diffraction). The quality goal-setting document also includes actions to organize career-oriented events involving labor market stakeholders.

The Student Guide is a comprehensive, well-organized, and appropriate document. It covers all essential information, including the programme's scope, objectives, and participating institutions; the detailed curriculum structure, ECTS credits, and course descriptions; the regulations governing the academic advisor system, complaint mechanisms, and student rights and obligations; the procedures for the selection, supervision, examination, and submission of the master's thesis; and information on mobility (Erasmus+) and practical training (internships).

II. Analysis

The PSP demonstrates a highly systematic and well-documented approach to the design and approval of its programme. The approval process was thorough, involving formal decisions from all six partner institutions and multiple publications in the Official Gazette, ensuring its legal and academic standing. The factors considered in its design were comprehensive, encompassing institutional strategy, the specific academic field, labor market needs, and the regulatory framework, demonstrating a holistic approach to programme development.

The programme structure is exemplary. Its logical progression from foundational theory to specialized research practice is clearly articulated and adheres to the ECTS system for workload measurement. The curriculum is appropriately set at Level 7 of the EQF, and the learning outcomes are clearly defined and publicly available. The mandatory nature of all courses ensures a consistent level of quality, while the progressive structure allows students to build their knowledge and skills incrementally.

The Student Guide serves as an excellent resource for students, providing them with all necessary information in a well-organized format that facilitates their navigation of the programme.

The curriculum revision procedure is functional and responsive. The documented syllabus revision in response to student feedback demonstrates a genuine commitment to continuous improvement rather than a merely bureaucratic exercise. Furthermore, the active involvement of students, graduates, and external experts in this process ensures that the programme remains dynamic, relevant, and aligned with current developments in both academia and the labour market.

The linking of teaching with research is a fundamental strength of the programme's design. This is achieved through research-integrated courses such as "Introduction to the Research Laboratory," the integration of students into active research teams led by faculty, and the requirement for an original research thesis that often leads to publications and conference presentations.

III. Conclusions

The PSP "Inorganic Biological Chemistry" has been designed, approved, and is implemented according to a rigorous, transparent, and well-documented procedure that fully complies with the standards of Principle 2.

The programme's structure is rational, its learning outcomes are appropriate for Level 7, and its curriculum is oriented towards deepening knowledge and acquiring advanced research and professional skills. The Student Guide is comprehensive and serves its purpose effectively. The PSP demonstrates a strong and functional link between teaching and research, and it has established clear procedures for periodic curriculum revision that involve the active participation of students, graduates, and external stakeholders.

Panel Judgement

Principle 2: Design and approval of postgraduate study programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

While the programme is fully compliant, the following recommendations are offered to further strengthen its design, approval, and continuous improvement processes:

1. **Systematize Graduate Feedback Collection:** While the PSP has begun tracking graduates through questionnaires, establishing a formal, structured system for alumni feedback would provide more comprehensive longitudinal data. Consider implementing regular, anonymized surveys distributed at defined intervals post-graduation (e.g., 1, 3, and 5 years). This would allow the PSP to track long-term career outcomes, assess the sustained relevance of the curriculum, and identify areas where graduates feel their training could have been strengthened.
2. **Document & Publicize External Stakeholder Input:** The PSP actively engages with external experts and labour market stakeholders through invited lectures, seminars, and career events. However, to strengthen the evidence base for curriculum revisions, it is recommended that this input be formally announced and documented. This could include minutes from the External Advisory Board meetings or with industry representatives, written feedback from invited experts who deliver guest lectures or specialized modules, and summaries of discussions from career-oriented events. Explicitly linking such documented feedback to curriculum revision decisions in annual quality assurance reports would enhance transparency and demonstrate a systematic approach to incorporating external perspectives.
3. **Diversify Learning Outcomes Assessment Methods:** The current assessment mechanisms (course evaluations and thesis examination) are robust. However, to gain a more holistic view of student achievement, the PSP could consider implementing an evaluation mechanism

during the final project presentation of the students and evaluate all key learning outcomes— theoretical knowledge, research skills, critical thinking, and professional competencies—in a single culminating exercise. Such an approach would provide a comprehensive measure of whether students have achieved the full range of Level 7 qualifications.

4. **Enhance the Student Guide with Digital Accessibility Features:** The Student Guide is already a comprehensive and well-organized document. To further improve its utility, the PSP could consider enhancing its digital accessibility by ensuring the document is fully searchable and optimized for mobile devices, adding hyperlinks within the document to relevant online resources such as course syllabi and application forms, and providing a downloadable PDF version alongside an accessible HTML version for users with disabilities.

PRINCIPLE 3: STUDENT-CENTRED LEARNING, TEACHING, AND ASSESSMENT

INSTITUTIONS SHOULD ENSURE THAT POSTGRADUATE STUDY PROGRAMMES PROVIDE THE NECESSARY CONDITIONS TO ENCOURAGE STUDENTS TO TAKE AN ACTIVE ROLE IN THE LEARNING PROCESS. THE ASSESSMENT METHODS SHOULD REFLECT THIS APPROACH.

Student-centred learning and teaching plays an important role in enhancing students' motivation, their self-evaluation, and their active participation in the learning process. The above entail continuous consideration of the programme's delivery and the assessment of the related outcomes.

The student-centred learning and teaching process

- *respects and attends to the diversity of students and their needs by adopting flexible learning paths*
- *considers and uses different modes of delivery, where appropriate*
- *flexibly uses a variety of pedagogical methods*
- *regularly evaluates and adjusts the modes of delivery and pedagogical methods aiming at improvement*
- *regularly evaluates the quality and effectiveness of teaching, as documented especially through student surveys*
- *strengthens the student's sense of autonomy, while ensuring adequate guidance and support from the teaching staff*
- *promotes mutual respect in the student-teacher relationship*
- *applies appropriate procedures for dealing with the students' complaints*
- *provides counselling and guidance for the preparation of the thesis*

In addition

- *The academic staff are familiar with the existing examination system and methods and are supported in developing their own skills in this field.*
- *The assessment criteria and methods are published in advance. The assessment allows students to demonstrate the extent to which the intended learning outcomes have been achieved. Students are given feedback, which, if necessary is linked to advice on the learning process.*
- *Student assessment is conducted by more than one examiner, where possible.*
- *Assessment is consistent, fairly applied to all students and conducted in accordance with the stated procedures.*
- *A formal procedure for student appeals is in place.*
- *The function of the academic advisor runs smoothly.*

Documentation

- *Sample of a fully completed questionnaire for the evaluation of the PSP by the students*
- *Regulations for dealing with students' complaints and appeals*
- *Regulation for the function of academic advisor*
- *Reference to the teaching modes and assessment methods*

Study Programme Compliance

I. Findings

The PSP "Biological Inorganic Chemistry" is a three-academic semesters programme and addresses graduates from departments of Chemistry, Biology, Biological Applications and Technologies, Medicine, Pharmacy, Biochemistry, Chemical Engineering, Materials Engineering, and related Departments of Higher Education Institutions in Greece, or from equivalent recognized institutions abroad. Graduates from other fields within the natural

sciences or health sciences of related subject areas may be admitted to the PSP, provided that they attend and are examined in additional undergraduate-level courses.

All courses are taught at the facilities of the departments participating in the program. Part of the lectures and laboratory sessions may be conducted through distance learning, depending on the needs of students and instructors. The educational process is carried out using synchronous distance learning methods, in accordance with the provisions of Law 4957/2022, Article 88.

Each semester lasts at least thirteen (13) weeks, not including the exam period, which lasts two (2) weeks. Depending on the course, students are assessed through written or oral examinations, assignments and presentations. At the end of the semester and after the exams period students are given a questionnaire by MODIP to evaluate the courses and the teaching staff.

The PSP has introduced the role of Academic Advisor to enhance student-centered education and improve educational and administrative services. There is also a regulation for handling student complaints and appeals.

II. Analysis

The program offers a diverse selection of courses closely aligned with the objectives of the PSP. Students, alumni, and stakeholders expressed to the EEA Panel their enthusiasm for quality of the curriculum. Moreover, students are actively encouraged to participate in research publications during their studies, an opportunity that greatly supports their academic growth and career prospects.

All students and graduates were informed of the opportunity to evaluate courses and teaching staff through a questionnaire. However, participation rates were notably low, mainly due to the excessive length of the questionnaire structured by MODIP. Teaching staff acknowledged that the questionnaire is excessively long and a new practice was adopted. Students were now encouraged by the teaching staff to complete the questionnaires during the final hour of class within the semester, in order to increase the response rate and ensure more representative feedback.

The academic advisor appointed for each student is the same as the thesis supervisor. Overall, students, graduates and stakeholders interviewed by the EEA Panel stated their satisfaction with the high-quality education provided, as well as with their academic or professional pursuits.

III. Conclusions

The programme is in accordance with the expectations of Principle 3 relative to student-centred learning, teaching, and assessment and meets the relevant HAHE standards.

Panel Judgement

Principle 3: Student-centred learning, teaching, and assessment	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

PRINCIPLE 4: STUDENT ADMISSION, PROGRESSION, RECOGNITION OF POSTGRADUATE STUDIES, AND CERTIFICATION.

INSTITUTIONS SHOULD DEVELOP AND APPLY PUBLISHED REGULATIONS COVERING ALL ASPECTS AND PHASES OF STUDIES (ADMISSION, PROGRESSION, THESIS DRAFTING, RECOGNITION AND CERTIFICATION).

All the issues from the beginning to the end of studies should be governed by the internal regulations of the academic units. Indicatively:

- *the student admission procedures and the required supporting documents*
- *student rights and obligations, and monitoring of student progression*
- *internship issues, if applicable, and granting of scholarships*
- *the procedures and terms for the drafting of assignments and the thesis*
- *the procedure of award and recognition of degrees, the duration of studies, the conditions for progression and for the assurance of the progress of students in their studies*
- *the terms and conditions for enhancing student mobility*

All the above must be made public in the context of the Student Guide.

Documentation

- *Internal regulation for the operation of the Postgraduate Study Programme*
- *Research Ethics Regulation*
- *Regulation of studies, internship, mobility, and student assignments*
- *Degree certificate template*

Study Programme Compliance

I. Findings

The PSP has established and published a comprehensive set of internal regulations covering all stages of postgraduate studies which are available on the website of the PSP. These regulations clearly cover student submission procedures, progression rules, assessment methods, thesis drafting and examination, degree award and certification. Admission criteria, required qualifications, supporting documentation, and selection procedures are transparently defined and available through the Study Guide, which is also available on the website of the PSP. Student rights and obligations are also well described. The regulation describes in detail the teaching and assessment methods, while ethical issues are also regulated. The procedures for degree award and issuance of the Diploma Supplement are clearly defined and consistent with national standards.

II. Analysis

The regulatory framework of the PSP is well structured and fully aligned with institutional policies. The regulations demonstrate a systematic approach to managing the student lifecycle from admission to graduation, ensuring transparency and consistency. A regulatory framework for distance learning is in place, as the PSP is offered partly through online participation. The Study Guide and the Regulation of Studies contain all relevant regulatory information, making it easily accessible via the PSP website to students and other stakeholders. The implementation of Research Ethics and Code of Good Practice of the University of Ioannina (meeting no. 228 / 19 october 2022) is in alignment with international

academic standards. However, there is currently no structured mechanism in place for monitoring the career paths of graduates.

III. Conclusions

The programme is in accordance with the expectations of Principle 4 relative to student admission, progression, recognition of postgraduate studies, and certification and meets the relevant HAHE standards.

Panel Judgement

Principle 4: Student admission, progression, recognition of postgraduate studies and certification	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

To further enhance adherence to principle 4, the EEAP recommends:

- Establish a formal, structured mechanism for collecting data regarding the career paths of graduates

PRINCIPLE 5: TEACHING STAFF OF POSTGRADUATE STUDY PROGRAMMES

INSTITUTIONS SHOULD ASSURE THEMSELVES OF THE LEVEL OF KNOWLEDGE AND SKILLS OF THEIR TEACHING STAFF, AND APPLY FAIR AND TRANSPARENT PROCESSES FOR THEIR RECRUITMENT, TRAINING AND FURTHER DEVELOPMENT.

The Institution should attend to the adequacy of the teaching staff of the academic unit teaching at the PSP, the appropriate staff-student ratio, the appropriate staff categories, the appropriate subject areas, the fair and objective recruitment process, the high research performance, the training- development, the staff development policy (including participation in mobility schemes, conferences, and educational leaves-as mandated by law).

More specifically, the academic unit should set up and follow clear, transparent and fair processes for the recruitment of properly qualified staff for the PSP and offer them conditions of employment that recognise the importance of teaching and research; offer opportunities and promote the professional development of the teaching staff; encourage scholarly activity to strengthen the link between education and research; encourage innovation in teaching methods and the use of new technologies; promote the increase of the volume and quality of the research output within the academic unit; follow quality assurance processes for all staff (with respect to attendance requirements, performance, self-assessment, training, etc.); develop policies to attract highly qualified academic staff.

Documentation

- Procedures and criteria for teaching staff recruitment
- Employment regulations or contracts, and obligations of the teaching staff
- Policy for staff support and development
- Individual performance of the teaching staff in scientific-research and teaching work, based on internationally recognised systems of scientific evaluation (e.g. Google Scholar, Scopus, etc.)
- List of teaching staff including subject areas, employment relationship, Institution of origin, Department of origin

Study Programme Compliance

I. Findings

The panel's, academic profiles & research output, discussions with the faculty and the provided documentation reveals that the "Biological Inorganic Chemistry" PSP is supported by a highly qualified and research-active teaching staff. The processes for their engagement, development, and evaluation are well-defined and aligned with national legislation. Key findings are as follows:

Recruitment Processes & Criteria: The PSP follows a clear, transparent, and merit-based process for recruiting teaching staff, governed by national law (N.4957/2022). Staff are appointed by the General Assemblies of the participating departments based on the PSP's teaching needs. The Program Committee can also invite distinguished Greek or foreign scientists to cover specialized areas, as demonstrated by the invitation of experts from "Demokritos" and the approval of guest lecturers.

1. **Employment Regulations & Obligations:** The obligations of the teaching staff are explicitly defined in the PSP's regulations. Key responsibilities include being available to students, providing necessary resources, and ensuring student co-authorship in publications derived from their thesis work.

2. **Staff Composition & Qualifications:** The PSP boasts a highly qualified teaching staff consisting of 24 members from six Greek and Cypriot universities. This group includes professors, associate professors, and special teaching staff (ΕΔΙΠ), all with internationally recognized research and teaching experience. A detailed list was provided to the panel.
3. **Research Performance:** The academic staff demonstrates high research performance, as evidenced by bibliometric data. Key indicators include:
 - High total document counts and citations.
 - Notable h-index values, with several faculty members exceeding 30 (14/24) and others 40 (4/24).
 - Significant and sustained participation in international conferences.
4. **Workload:** The weekly teaching workload is documented. The average is 26.3 hours per week, with a range from 14 to 65 hours. This calculation includes undergraduate teaching and supervision but not postgraduate thesis supervision, which is considered part of their research activity. Faculty presence is higher to cover all academic, research, and administrative obligations.
5. **Linking Teaching with Research:** The PSP systematically integrates teaching and research through:
 - **Methodological Courses:** "Introduction to the Research Laboratory" and similar courses are designed to immerse students in the research process.
 - **Student Integration:** Students are directly integrated into active research teams and programs led by faculty.
 - **Dissemination of Results:** Students are strongly encouraged to publish their thesis results and present at international conferences, with numerous examples were provided.
 - **Invited Lectures:** The PSP regularly invites leading researchers to give lectures and interact with students, exposing them to cutting-edge developments.
6. **Student Evaluation of Teaching:** The teaching staff is regularly evaluated by students through anonymous, electronic questionnaires at the end of each semester. The results are processed by the University's Quality Assurance Unit (MODIP) and are formally reviewed by the PSP's Program Committee to identify areas for improvement. A detailed example from the 2021-2022 academic year shows high satisfaction ratings and documents a specific instance of syllabus reorganization in response to student feedback.
7. **Staff Development & Mobility:**
 - **Professional Development:** The University's strategic plan commits to staff development, supporting research activities and conference participation. The PSP promotes innovation in teaching methods and the use of new technologies. The School of Sciences' Teaching Award recognizes and encourages teaching excellence.
 - **Mobility:** Staff mobility is actively encouraged. Faculty members participate in international networks (e.g., COST actions, European Chemistry Thematic Network). The PSP also invites distinguished international scientists (e.g., Prof. M. Kubicki from Poznan University) to teach and collaborate, fostering a reciprocal environment for mobility.
8. **Research Strategy:** The PSP has a clearly defined research strategy focused on the specific interdisciplinary field of "Inorganic Biological Chemistry." This focus is central to its identity and is reflected in the faculty's research interests, the curriculum, and the quality goals for research output, student publications, and conference participation.

II. Analysis

The PSP demonstrates a comprehensive and highly effective system for managing its teaching staff, fully aligning with the requirements of Principle 5.

The recruitment process is transparent and merit-based, ensuring that only qualified experts are appointed. The qualifications of the teaching staff are exceptionally strong, as confirmed by the bibliometric data. This high research performance is not an isolated metric but is strategically leveraged to enrich the student experience.

The linkage between teaching and research is a foundational element of the PSP. It is systematically embedded in the curriculum, student activities, and the culture of the program. This provides students with an authentic, high-level research experience that is appropriate for a Master's program. The student evaluation system is robust and functional. It is a closed-loop process where feedback is formally reviewed and leads to tangible improvements, as evidenced by documented syllabus revisions.

The staff workload is high but is considered appropriate, with a clear differentiation that allows for and values research activity. The staff development and mobility opportunities are substantial, supported by institutional policy and the faculty's active engagement in international networks. The PSP's strategy to attract highly qualified staff is proactive, leveraging its research reputation, hosting international conferences, and inviting leading scientists to engage with its community.

III. Conclusions

The PSP "Biological Inorganic Chemistry" has established a model system for managing its teaching staff, demonstrating full compliance with Principle 5. The teaching staff is composed of exceptionally qualified and research-active academics from a consortium of leading institutions. The processes for recruitment are transparent and merit-based.

The PSP successfully integrates its teaching and research missions, providing students with a cutting-edge educational experience. The teaching staff is regularly and meaningfully evaluated by students, and the results are actively used for continuous improvement. Opportunities for staff development and mobility are promoted and utilized, and the PSP has a clear strategy to maintain its high academic standards.

Panel Judgement

Principle 5: Teaching staff of postgraduate study programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

- **Formalize a Staff Development Plan:** While opportunities exist, creating a formal, annual staff development plan linked to the PSP's strategic goals would further enhance the systematic professional growth of its faculty.
- **Enhance Evaluation Metrics:** Supplementing student evaluations with peer observation of teaching or structured feedback on thesis supervision could provide a more comprehensive 360-degree view of teaching staff performance.

PRINICPLE 6: LEARNING RESOURCES AND STUDENT SUPPORT

INSTITUTIONS SHOULD HAVE ADEQUATE FUNDING TO COVER THE TEACHING AND LEARNING NEEDS OF THE POSTGRADUATE STUDY PROGRAMME. THEY SHOULD –ON THE ONE HAND- PROVIDE SATISFACTORY INFRASTRUCTURE AND SERVICES FOR LEARNING AND STUDENT SUPPORT, AND – ON THE OTHER HAND- FACILITATE DIRECT ACCESS TO THEM BY ESTABLISHING INTERNAL RULES TO THIS END (E.G. LECTURE ROOMS, LABORATORIES, LIBRARIES, NETWORKS, NETWORKS, CAREER AND SOCIAL POLICY SERVICES ETC.).

Institutions and their academic units must have sufficient resources and means, on a planned and long-term basis, to support learning and academic activity in general, so as to offer PSP students the best possible level of studies. The above means include facilities such as the necessary general and more specialised libraries and possibilities for access to electronic databases, study rooms, educational and scientific equipment, IT and communication services, support and counselling services.

When allocating the available resources, the needs of all students must be taken into consideration (e.g. whether they are full-time or part-time students, employed students, students with disabilities), in addition to the shift towards student-centred learning and the adoption of flexible modes of learning and teaching. Support activities and facilities may be organised in various ways, depending on the institutional context. However, the internal quality assurance proves -on the one hand- the quantity and quality of the available facilities and services, and -on the other hand- that students are aware of all available services.

In delivering support services, the role of support and administration staff is crucial and therefore this segment of staff needs to be qualified and have opportunities to develop its competences.

Documentation

- Detailed description of the infrastructure and services made available by the Institution to the academic unit for the PSP, to support learning and academic activity (human resources, infrastructure, services, etc.) and the corresponding firm commitment of the Institution to financially cover these infrastructure-services from state or other resources
- Administrative support staff of the PSP (job descriptions, qualifications and responsibilities)
- Informative / promotional material given to students with reference to the available services
- Tuition utilisation plan (if applicable)

Study Programme Compliance

I. Findings

The PSP operates within the Chemistry department at the University of Ioannina (Uoi). The department provides comprehensive facilities including:

- Classroom for lectures and seminars
- Teaching laboratories
- Specialized laboratories for research
- A large seminar/conference room equipped with technology for remote participation
- Access to university main library

The university administration is actively working to upgrade and refurbish the infrastructure to meet current safety and chemical hygiene standards. After the evaluation process, the committee was provided with the safety procedures and found them to be satisfactory and appropriate for the program's needs.

The committee finds that the physical infrastructure and safety measures in place, adequately support the educational mission and research activities of the PSP

II. Analysis

While the laboratories are well-equipped with modern instrumentation, the program faces significant challenges due to insufficient technical support. Teaching staff are currently required to handle both user training and maintenance of sophisticated equipment, including state of the art NMR machines and their cryogenic probes. The arrangement is inefficient and places an inappropriate burden on academic staff.

The evaluation committee identified concerns regarding the funding of essential laboratory consumables for teaching purposes. These materials are often purchased using research grant funds creating sustainability issues for laboratory-based instruction.

Despite having quality equipment, the lack of dedicated technical support staff and unsustainable funding mechanisms for consumables may impact the effectiveness of the program.

III. Conclusions

The committee finds that the PSP is in compliance with Principle 6.

Panel Judgement

Principle 6: Learning resources and student support	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

PRINCIPLE 7: INFORMATION MANAGEMENT

INSTITUTIONS BEAR FULL RESPONSIBILITY FOR COLLECTING, ANALYSING AND USING INFORMATION, AIMED AT THE EFFICIENT MANAGEMENT OF POSTGRADUATE STUDY PROGRAMMES AND RELATED ACTIVITIES, IN AN INTEGRATED, EFFECTIVE AND EASILY ACCESSIBLE WAY.

Institutions are expected to establish and operate an information system for the management and monitoring of data concerning students, teaching staff, course structure and organisation, teaching and provision of services to students.

Reliable data is essential for accurate information and decision-making, as well as for identifying areas of smooth operation and areas for improvement. Effective procedures for collecting and analysing information on postgraduate study programmes and other activities feed data into the internal system of quality assurance.

The information collected depends, to some extent, on the type and mission of the Institution. The following are of interest:

- *key performance indicators*
- *student population profile*
- *student progression, success, and drop-out rates*
- *student satisfaction with their programmes*
- *availability of learning resources and student support*

A number of methods may be used to collect information. It is important that students and staff are involved in providing and analysing information and planning follow-up activities.

Documentation

- *Report from the National Information System for Quality Assurance in Higher Education (NISQA) at the level of the Institution, the department, and the PSP*
- *Operation of an information management system for the collection of administrative data for the implementation of the PSP (Students' Record)*
- *Other tools and procedures designed to collect data on the academic and administrative functions of the academic unit and the PSP*

Study Programme Compliance

I. Findings

The procedures for the internal and external evaluation of the academic departments participating in the PSP are managed by MODIP. The participating departments have established a good information management system for the current students that tracks the appropriate Key Performance Indicators (KPIs), the student population and progress and the availability of learning resources, the latter managed through OMEA.

The information is coordinated by the administrative personnel, who are responsible to maintain the data on course evaluations and student performance. The data are analyzed by the program committee, which makes recommendations to the Department's general assembly that has the authority to implement revisions of the graduate curriculum.

In addition, OMEA, the internal evaluation committee, analyzes the student data and uses this information to improve performance of both students and all teaching personnel.

The students commented positively on the encouragement of external mobility, accessibility of teaching staff, high standard of courses taught.

II. Analysis

The infrastructure of the University of Ioannina and its partner institutions is efficiently used by the PSP to collect and analyze the information related to the postgraduate programme with the goal to efficiently manage the program and its activities.

The existence of a formal, university-led alumni network that monitors the career paths of graduates and their position within the academic and industry sectors can substantially affect the professional development of the students.

III. Conclusions

The PSP is Fully compliant with Principle 7.

Panel Judgement

Principle 7: Information management	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

- Increase the number of student evaluations
- Establish a formal alumni network that systematically tracks the career path of the graduates.

PRINCIPLE 8: PUBLIC INFORMATION CONCERNING THE POSTGRADUATE STUDY PROGRAMMES

INSTITUTIONS SHOULD PUBLISH INFORMATION ABOUT THEIR TEACHING AND ACADEMIC ACTIVITIES RELATED TO THE POSTGRADUATE STUDY PROGRAMMES IN A DIRECT AND READILY ACCESSIBLE WAY. THE RELEVANT INFORMATION SHOULD BE UP-TO-DATE, OBJECTIVE AND CLEAR.

Information on the Institutions' activities is useful for prospective and current students, graduates, other stakeholders, and the public.

Therefore, Institutions and their academic units must provide information about their activities, including the PSP they offer, the intended learning outcomes, the degrees awarded, the teaching, learning and assessment procedures applied, the pass rates, and the learning opportunities available to their students. Information is also provided on the employment perspectives of PSP graduates.

Documentation

- *Dedicated segment on the website of the department for the promotion of the PSP*
- *Bilingual version of the PSP website with complete, clear and objective information*
- *Provision for website maintenance and updating*

Study Programme Compliance

I. Findings

The Program of Biological Inorganic Chemistry maintains a website available in both Greek and English. It provides a concise and detailed description of the program and its objectives. The Greek version includes links to relevant legislation governing the PSP, the PSP Quality Assurance Policy, information on teaching and administrative staff, a list of courses offered per semester along with timetables, the Study Guide, various PSP regulations, research activities with instructor names by area, a link to the internal evaluation of the PSP via MODIP, information on scholarships, and additional material on summer schools, activities, external chemistry-related resources, and PSP contact details.

Some faculty curriculum vitae would benefit from further updating and enrichment.

The English version of the website contains as much information as the Greek version, and several study regulations posted on the English site are available in both languages.

II. Analysis

The PSP provides extensive information on its website, with the content available in both Greek and English.

Faculty CVs are not easily available or up to date, which may hinder students seeking to select an appropriate research advisor for their thesis work.

Furthermore, the website does consistently provide information on the weighting of individual assessment components contributing to the final course grade across all listed courses.

III. Conclusions

The PSP maintains a website that provides sufficient information for both Greek- and English-speaking students. Therefore, the PSP **fully satisfies Principle 8**.

Panel Judgement

Principle 8: Public information concerning the postgraduate study programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

- 1) The PSP must develop succinct satisfaction surveys for its graduates and external stakeholders involved with the program.
- 2) The PSP should consider developing an External Advisory Board, with faculty, students, graduates, and external stakeholders to actively assist in the program improvements.
- 3) There seems to be no discussion on post graduate students with visible or invisible disabilities.

PRINCIPLE 9: ON-GOING MONITORING AND PERIODIC INTERNAL EVALUATION OF POSTGRADUATE STUDY PROGRAMMES

INSTITUTIONS AND ACADEMIC UNITS SHOULD HAVE IN PLACE AN INTERNAL QUALITY ASSURANCE SYSTEM FOR THE AUDIT AND ANNUAL INTERNAL REVIEW OF THEIR POSTGRADUATE STUDY PROGRAMMES, SO AS TO ACHIEVE THE OBJECTIVES SET FOR THEM, THROUGH MONITORING AND POSSIBLE AMENDMENTS, WITH A VIEW TO CONTINUOUS IMPROVEMENT. ANY ACTIONS TAKEN IN THE ABOVE CONTEXT SHOULD BE COMMUNICATED TO ALL PARTIES CONCERNED.

The regular monitoring, review, and revision of postgraduate study programmes aim at maintaining the level of educational provision and creating a supportive and effective learning environment for students.

The above comprise the evaluation of:

- a) the content of the programme in the light of the latest research in the given discipline, thus ensuring that the PSP is up to date*
 - b) the changing needs of society*
 - c) the students' workload, progression and completion of the postgraduate studies*
 - d) the effectiveness of the procedures for the assessment of students*
 - e) the students' expectations, needs and satisfaction in relation to the programme*
 - f) the learning environment, support services, and their fitness for purpose for the PSP in question*
- Postgraduate study programmes are reviewed and revised regularly involving students and other stakeholders. The information collected is analysed and the programme is adapted to ensure that it is up-to-date.*

Documentation

- *Procedure for the re-evaluation, redefinition and updating of the PSP curriculum*
- *Procedure for mitigating weaknesses and upgrading the structure of the PSP and the learning process*
- *Feedback processes concerning the strategy and quality goal setting of the PSP and relevant decision-making processes (students, external stakeholders)*
- *Results of the annual internal evaluation of the PSP by the Quality Assurance Unit (QAU), and the relevant minutes*

Study Programme Compliance

I. Findings

The PSP conducts an annual self-assessment process with the support of MODIP. Quality assurance objectives are set each year for all postgraduate programs within the Department. The findings of the PSP self-assessment are disseminated within the academic unit. The PSP is evaluated primarily through student course evaluations. However, the Panel found no evidence of satisfaction surveys targeting graduates or external stakeholders.

The PSP is aligned with current research developments in the field, as demonstrated by the program's course descriptions and faculty publications. Copies of student dissertations, however, are not publicly accessible.

II. Analysis

The PSP systematically collects data that inform program improvements. Student evaluation surveys are comprehensive and serve as an indirect assessment tool for the PSP.

Nevertheless, the absence of satisfaction surveys from graduates and external stakeholders limits the program's ability to obtain a holistic assessment of its effectiveness. Furthermore, students, graduates, and other stakeholders do not appear to be directly involved in decision-making processes related to curriculum enhancement.

Student participation in course evaluations is 100%, and the results indicate a high level of satisfaction with course objectives and the material covered.

III. Conclusions

The PSP is assessed primarily through student evaluations. It **fully satisfies Principle 9** due to the structured feedback mechanisms for graduates and external stakeholders, as well as the engagement of students, graduates, and external stakeholders in program improvement processes.

Panel Judgement

Principle 9: On-going monitoring and periodic internal evaluation of postgraduate study programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

- 1) The PSP must develop satisfaction surveys for its graduates and external stakeholders involved with the program.
- 2) The PSP should consider developing an External Advisory Board, with faculty, students, graduates, and external stakeholders to actively assist in the program improvements.

PRINCIPLE 10: REGULAR EXTERNAL EVALUATION OF POSTGRADUATE STUDY PROGRAMMES

THE POSTGRADUATE STUDY PROGRAMMES SHOULD REGULARLY UNDERGO EVALUATION BY PANELS OF EXTERNAL EXPERTS SET BY HAHE, AIMING AT ACCREDITATION. THE TERM OF VALIDITY OF THE ACCREDITATION IS DETERMINED BY HAHE.

HAHE is responsible for administrating the PSP accreditation process which is realised as an external evaluation procedure, and implemented by panels of independent experts. HAHE grants accreditation of programmes, based on the Reports delivered by the panels of external experts, with a specific term of validity, following to which, revision is required. The quality accreditation of the PSP acts as a means for the determination of the degree of compliance of the programme to the Standards, and as a catalyst for improvement, while opening new perspectives towards the international standing of the awarded degrees. Both academic units and Institutions must consistently consider the conclusions and the recommendations submitted by the panels of experts for the continuous improvement of the programme.

Documentation

- *Progress report of the PSP in question, on the results from the utilisation of possible recommendations included in the External Evaluation Report of the Institution, and in the IQAS Accreditation Report, with relation to the postgraduate study programmes*

Study Programme Compliance

I. Findings

Although this PSP has not undergone a previous external evaluation, it has proactively adopted relevant recommendations from the broader University of Ioannina external evaluation.

II. Analysis

This review represents the program's first formal external evaluation. Despite this being an initial assessment, the PSP has already implemented several quality improvement measures:

- The program now uses digital evaluation to enable faster data processing and more timely feedback to students, faculty and administrators. Nevertheless, the committee is concerned with the extremely low number of student participants and encourages finding ways to motivate and increase student participation.
- Comprehensive course syllabi are publicly available on the program's website, improving accessibility and clarity for stakeholders.

III. Conclusions

While this marks the PSP's inaugural external evaluation, the program has shown a commitment to continuous improvement through various internal quality assurance mechanisms, including informal student and industry representatives feedback and regular faculty discussions about program enhancement.

The review committee recommends establishing an external advisory board that includes diverse stakeholders, particularly industry representatives to provide ongoing guidance and ensure program relevance.

The committee finds that the PSP meets the requirements of Principle 10.

Panel Judgement

Principle 10: Regular external evaluation of postgraduate study programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

PART C: CONCLUSIONS

I. Features of Good Practice

Uniqueness of program of study in the Greek territory

Inter-institutional and interdisciplinary nature

Excellent organization of PSP

Structure, quality and teaching staff are excellent

Excellent infrastructure and laboratory facilities

Good mobility of students attending the PSP

Accessibility of teaching staff

II. Areas of Weakness

Lack of alumni registry

Not enough data on student evaluations

The large number of instructors per course can be challenging

Lack of funds for internal mobility (within the institutional partners of the PSP)

III. Recommendations for Follow-up Actions

Advertise PSP's success

Advertise external stakeholder input

Make student feedback collection systematic

Establish a formal alumni registry

Develop an annual staff development plan

IV. Summary & Overall Assessment

The Principles where full compliance has been achieved are:

1, 2, 3, 4, 5, 6, 7, 8, 9, 10

The Principles where substantial compliance has been achieved are:

None

The Principles where partial compliance has been achieved are:

None

The Principles where failure of compliance was identified are:

None

Overall Judgement	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

The members of the External Evaluation & Accreditation Panel

Name and Surname

Signature

1. Sotirios Xantheas
2. Dimitrios Argyropoulos
3. Emmanuel Giannelis
4. Christos Takoudis
5. Zoi-Lina Koutsogianni